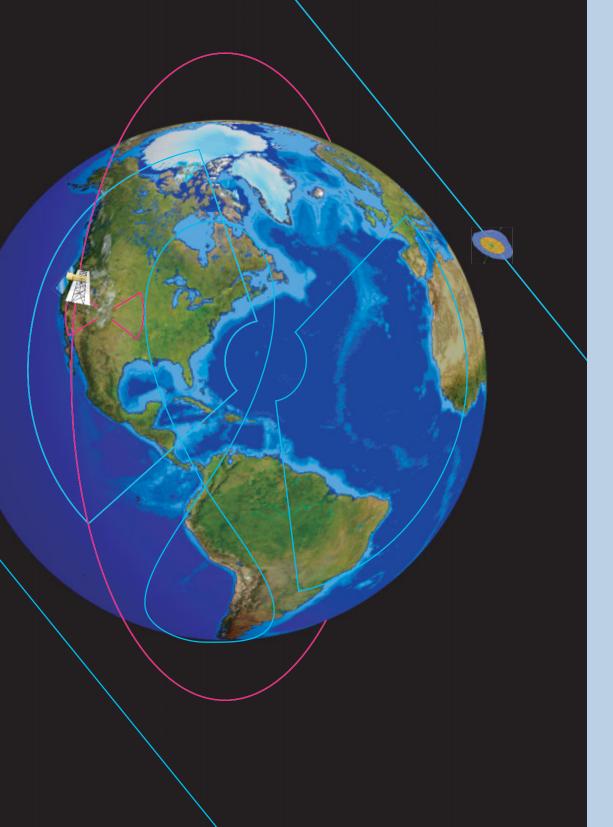
# GLOBAL EARTHQUAKE SATELLITE SYSTEM



A 20-YEAR

PLAN TO

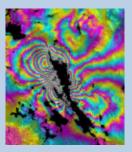
ENABLE

EARTHQUAKE

PREDICTION

MARCH 2003





# **Appendix**

## **GESS Investigators**

PRINCIPAL AND CO-INVESTIGATORS/ INSTITUTIONS	REPORT
Burgmann, R., Freed, A., and Schmidt, D.– <i>UC Berkeley</i>	InSAR System Requirements for Resolution of Crustal Deformation Parameters Associated with the Earthquake Cycle
Chao, B., Harding, D., Cohen, S., and Luthcke, S.– <i>NASA/GSFC</i> ; Hofton, M. and Blair, J. B.– <i>University of Maryland</i>	Global Earthquake Satellite System Requirements Derived from a Suite of Scientific Observational and Modeling Studies: Final Reports
Crippen, R.– JPL	Thermal Imaging of Seismic Events
Donnellan, A. and Hurst, K.–JPL	Inversion of Earthquake Fault Parameters Using Multiple Look Angles
Feigl, K., McClusky, S., Herring, T., and Reilinger, R.– Massachusetts Institute of Technology	Geodetic Improvements for Calculating, Analyzing, and Modeling INSAR Measurements in Synergy with GPS
Fielding, E. J.– <i>JPL</i> ; Wright, T. J.– <i>University</i> of Oxford (UK)	Deformation on Complex Fault Zones, Interseismic, Co-seismic and Post-seismic Strain
Melbourne, T. and Baxter, S <i>Central</i> Washington University; Webb, FJPL	Quantifying Earth's Surface Deformation Budget
Olsen, K. and Peyrat, S.– <i>UC Santa Barbara</i>	Which Rupture Dynamics Parameters Can Be Estimated from SAR and Strong Ground Motion Data?
Price, E., Elitas, S., Freymueller, J., McNutt, S., and Hansen, R.– <i>Universityof Alaska</i>	Requirements of a SAR Satellite for Monitoring Earthquakes and Crustal Deformation in Alaska
Rundle, J. B. and Kellogg, L. H. – <i>UC Davis</i>	Requirements for Modeling Systems Associated with the NASA Global Earth Satellite System (GESS)
Sammis, C. G.– <i>University of Southern California</i> ; Ivins, E.– <i>JPL</i>	Using GESS to Detect Stress Shadows Following Large Earthquakes and to Monitor Their Decay
Sandwell, D. and Fialko, Y.– Scripps/UC San Diego	Requirements for Observing Slow Crustal Deformation Due to Tectonic and Volcanic Processes in the Presence of Tropospheric Noise and Decorrelation
Shinozuka, M. and Bardet, J-P.– <i>University of</i> Southern California; Eguchi, R.– <i>ImageCat, Inc.</i>	Change Detection Studies for Liquefaction Ground Failure
Simons, M.–Caltech	Constraining Co-seismic Fault Motion and Surface Disruption of Large Earthquakes Using INSAR and Seismology
Taylor, P. and Purucker, M.–NASA/GSFC	Searching for a Magnetic Signature from Earthquakes in the lonosphere
Webb, F.– JPL; Emardson, R.–JPL (visiting); Simons, M.–Caltech	Neutral Atmospheric Delay in Interferometric Synthetic Aperture Radar Applications: Statistical Description and Mitigation
Zebker, H. and Segall, P.–Stanford	Characterizing Space–Time Patterns of Slip at Depth Along Fault Systems: InSAR Measurement and System Requirements

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JPL 400-1069 03/03